AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Previously presented) A method for prophylaxis or treatment of a cancer in a mammal, wherein cancer cells of the cancer express a MAP kinase and the method comprises treating the mammal with an effective amount of a polypeptide that binds to a binding domain of the MAP kinase for a cytoplasmic binding domain of a β integrin subunit for the MAP kinase, and the β integrin subunit is essentially not expressed by the cancer cells.

2-85. (Cancelled)

86. (New) A method according to claim 1 wherein the polypeptide comprises the binding domain of the β integrin subunit for the MAP kinase.

87. (New) A method according to claim 1 wherein the polypeptide comprises a modified amino acid sequence compared to the binding domain of the β integrin subunit and the modified amino acid sequence has sufficient amino acid sequence homology with the binding domain of the β integrin subunit to bind to the binding domain of the MAP kinase.

88. (New) A method according to claim 3 wherein the modified amino acid sequence comprises the binding domain of the β integrin subunit in which one or more amino acids in a linker region of the binding domain non-essential for the binding of the MAP kinase have been deleted.

89. (New) A method according to claim 4 wherein the linker region of the binding domain has been deleted in the modified amino acid sequence.

90. (New) A method according to claim 4 wherein the linker region binds opposite end regions of the binding domain of the β integrin subunit together and the

end regions are unchanged in the modified amino acid sequence compared to the binding domain of the β integrin subunit.

91. (New) A method according to claim 4 wherein the modified amino acid sequence has at least 50% overall amino acid sequence homology with the binding domain of the β integrin subunit.

92. (New) A method according to claim 1 wherein the polypeptide is selected from the group consisting of RSKAKWQTGTNPLYR (SEQ ID No: 4), RARAKWDTANNPLYK (SEQ ID No: 5), RSRARYEMASNPLYR (SEQ ID No: 6), RSKAKNPLYR (SEQ ID No: 7), RARAKNPLYK (SEQ ID No: 8), RSRARNPLYR (SEQ ID No: 9), KEKLKSQWNNDNPLFK (SEQ ID No: 11) and KEKLKNPLFK (SEQ ID No: 10).

93. (New) A method according to claim 1 wherein the polypeptide is coupled to a facilitator moiety that facilitates passage of the polypeptide across the outer cell membrane of the cancer cells.

94. (New) A method according to claim 9 wherein the facilitator moiety comprises a signal peptide, or a partial sequence or a modified form thereof.

95. (New) A method according to claim 10 wherein the signal peptide is a signal peptide for a growth factor.

96. (New) A method according to claim 10 wherein the signal peptide comprises the amino acid sequence AAVALLPAVLLALLA (SEQ ID No: 1).

97. (New) A method according to claim 10 wherein the signal peptide comprises the amino acid sequence AAVALLPAVLLALLAP (SEQ ID No: 3).

98. (New) A method according to claim 1 wherein the polypeptide has a length of greater than 5, and up to 15, amino acids.

99. (New) A method according to claim 14 wherein the polypeptide has a length of from 10 to 15 amino acids.

100. (New) A method according to claims 1 wherein the β integrin subunit is selected from the group consisting of β2, β3, β5 and β6.

101. (New) A method according to claim 16 wherein the β integrin subunit is β6.

102. (New) A method according to claim 1 wherein the MAP kinase is selected from the group consisting of extracellular signal-regulated kinases (ERKs).

103. (New) A method according to claim 18 wherein the MAP kinase is ERK2.

104. (New) A method according to claim 1 wherein the polypeptide is administered subcutaneously to the mammal for contact with the cancer cells at a site remote from the site of administration of the polypeptide.

105. (New) A method according to claim 1 wherein the cancer is selected from the group consisting of epithelial cell cancers, prostate cancer, lymphomas, blood cell cancers, leukemias, and cancer of the liver, tongue, salivary glands, gums, floor and other areas of the mouth, oropharynx, nasopharynx, hypopharynx and other oral cavities, oesophagus, gastrointestinal tract, stomach, small intestine, duodenum, colon, rectum, gallbladder, pancreas, larynx, trachea, bronchus, lung, breast, uterus, cervix, ovary, vagina, vulva, prostate, testes, penis, bladder, kidney, thyroid, and skin.

106. (New) A method according to claims 1 wherein the cancer is an epithelial cell cancer.

107. (New) A method according to claim 9 wherein the polypeptide has a length of greater than 5, and up to 15, amino acids.